

REMARKS

This application has been carefully reviewed in light of the above final office action. Reconsideration is respectfully requested in view of the following:

The Rejections under 35 U.S.C. §101

Claims 4, 5, 26 and 82-86 were rejected under 35 U.S.C. §101. Applicants feel that these claims are statutory, and reserves the right to present these claims or similar claims in a continuing application. However, in order to expedite allowance or simplify issues for appeal, Applicants are canceling these claims for now without prejudice.

The Interview of September 13, 2005

The undersigned appreciates the courtesy of the interview conducted on September 13, 2005 between the undersigned and Examiner Shiferaw and Primary Examiner LaForgia. During that interview, Mr. LaForgia indicated that his understanding of the Jandel reference is that it relates to an image, whereas Applicants' relate more to video content. It was further indicated that amendments to clarify this distinction would be helpful. The undersigned pointed out that Jandel also fails to disclose that multiple encrypted portions are actually identical data. Mr. LaForgia and Ms. Shiferaw also indicated that a shift from language using the term "content" to a focus on the fact that the data are identical would clarify the claims. The Examiners further commented that some of the claim preambles should be made more descriptive. Applicants appreciate the courtesies extended during this interview, and submit the present amendment in response thereto.

The Claim Rejections and the Jandel Reference

The following remarks are in official response to the Office Action dated July 25, 2005.

All claim rejections are again based on the Jandel reference. The Examiner asserts that Applicants' arguments are in error regarding the meaning of the Jandel

reference. Applicants' position remains that Jandel fails to support "duplicate selected content and encrypt duplicate copies of the same selected content multiple times under multiple encryption schemes". Jandel in fact fails to teach or suggest this claim feature.

The Examiner further asserts that Applicants are confused that Jandel's reference is not teaching the claimed limitations as claimed on claims 6 and 14: "receiving multiple selectively encrypted content in which the primary PID identifies unencrypted packets as well as selected packets of content that are encrypted under a first encryption method, and wherein the content further comprises a duplicate of the selected packets of content encrypted under a second encryption method that are identified by the secondary PID". With all due respect, Applicants stand by this position.

The Office Action asserts that *"Jandel teaches encrypting portions of image data according to multiple encryption method (first encryption method, and second encryption method)... . When the encrypted portions are decrypted they have the same resolution but different quality and also before the data is encrypted the segmented portions are the same digital data. Jandel's encrypted image portions are not different data, they are the same image but different quality."* Applicants respectfully disagree.

Jandel's invention relates to a system for providing successively higher quality images for subscription distribution, while avoiding the large memory requirements of storing multiple copies of the same image having different quality. Jandel overcomes the memory requirements by providing a low quality base image data, and complementary image data that when sequentially, and conjunctively combined with the base image data and preceding complementary image data generates a higher quality image.

Note the following passages of Jandel addressing the problem and Jandel's advantages starting at page 2 which states in part:

- *"The problems ... are that at least two different versions of the same image need to be stored and that both versions must also be transmitted over the network in case of remote access in the case a customer first wants to see the free low resolution image before paying for the full resolution version."*

- *"This is a significant disadvantage if the reduced version image contains a large fraction of the image information."*

And on page 3 referring to his invention:

- *"The storage space required for storing the first and second section together is essentially the same as the storage space required for storing the unencrypted full quality image."*

And on page 4, again touting his invention:

- *"Transmission times become much lower if the information content of the first, low resolution, image data can be reused when transmitting the higher resolution image data."*

Jandel's base image is a recognizable, visually coherent, but low quality image. The quality of the base image may be improved by subscribing to or purchasing complementary image data. Successively higher quality requires the conjunctive, sequential combination of the base image with one or more complementary image data portions.

Now consider the following direct quotations from Jandel (with emphasis added):

Jandel, in the several paragraphs starting at page 4 last paragraph, states the following:

- *"the image data file consists of a number of different independently decodable coding sections 101, 103 and 105. In the file structure shown in Fig. 1, the section 101, which is a low resolution version of a high resolution image, is coded without encryption ... "*
- *"The section 103, which comprises data, which combined with the data of section 101, result in a medium resolution image, is encrypted by a first encryption method ... "*
- *"The section 105, which comprises data, which when combined with the data of sections 101 and 103 results in a full resolution image, is encrypted using a second encryption method ... "*

- *"Decoding of the section 101 will result in a low resolution image version 107. Decryption 109 and decoding to the section 103 will, combined with the image data from the section 101 result in a medium resolution image 111. Decryption 113 and decoding of the section 105 will, combined with the image data from the section 101 and 103 result in a full resolution image 115."*

In addition to the above, note that Fig. 1 of Jandel shows the "Image File" (unnumbered) as consisting of sections 101, 103 and 105. Also note that only section 101 is required to get a "low quality image". Also note that image 107 and the output of 109 are both required to get a "medium quality image" 111, and note that image 111 plus image 113 all three are required to get a "high quality image" 115.

Jandel excludes image data from the base image to provide a base image that is either lower in resolution, or is incomplete in some way.

Jandel states at the top of page 4:

- *"A reduced quality image can be produced according to several different main schemes, such as
Reduced resolution
Reduced accuracy of the transform coefficients
Exclusion of predefined regions of interest (ROI)."*

Consideration of the discussion above result in the following conclusions:

1. Jandel uses the terms "resolution" and "quality" loosely and often synonymously and interchangeably. (e.g., the text refers to image 111 as a "medium resolution image", and the drawing calls it a "medium quality image".) Apparently, however, a reduced resolution image is one embodiment of what Jandel refers to as reduced quality.
2. Jandel clearly does use reduced resolution in at least one embodiment.
3. Each of the three mechanisms listed by Jandel as producing a reduced quality image involves modification of data in a manner that reduces information in any file that stores or transports the data.
4. Jandel in fact encrypts different information (i.e., the data in each portion is not duplicated). Rather the image data in each portion is complementary (builds one on the

other), sequential (must be combined in a specific order to the base image), and conjunctive (higher resolution image data portions must be preceded by the decryption and combining of lower resolution data portions to the base image data). The image data in encrypted section 103 is different than the image data of open section 101, and both of the foregoing are different from the image data in encrypted section 105. - Otherwise, the text would not state (to paraphrase) that image 111 requires image 107 plus the decrypted content of encrypted section 103; and, the text would not state that image 115 requires image 107 plus image 111 plus the decrypted content of encrypted section 105. Thus, the image data in 103 is complementary to that of 101 - not identical. Similarly, the image data in 105 is complementary to that of 103 and 101 - not identical to either.

To paraphrase and shorthand:

- 111 requires 101 + decrypted 103; and
- 115 requires 107 + 111 + decrypted 105.

5. Referring to Jandel's statement of the problem, he fails to resolve the problem if sections 101, 103 and 105 are the same image. Jandel's system only makes sense in the context of the stated problem if the combined storage of all three sections of the image results in significant storage savings. Further, Jandel explicitly states that the data from the lower resolution images is reused, in a conjunctive and sequential manner, for the higher resolution images.

6. Jandel states that the storage space for the first and second sections (presumably sections 101 and encrypted 103) is approximately the same as the full resolution image (in this context, Jandel is apparently only referring to a process involving two segments, but the statement is logically extended to three).

7. The Examiner's assertion that when the encrypted portions are decrypted they have the same resolution but different quality is a contradiction in one of Jandel's embodiments, since Jandel sometimes uses the terms somewhat interchangeably. In the embodiment depicted in Fig. 1, the assertion is clearly erroneous since Jandel achieves the lower quality by use of lower resolution. While Applicants' prior arguments

used the term "resolution" too loosely (as does Jandel), the same arguments are applicable if one substitutes "quality". From the above, it cannot be disputed that Jandel's encrypted portions encrypt different data. Thus, all claims are believed to clearly distinguish over Jandel.

Applicants respectfully ask that the Examiner now consider the explicit language of each of the independent claims (prior to amendment) as follows, and in light of the above:

- Claim 1 - "the first and second content represent identical content when unencrypted".
- Claims 6, 11 - "the content further comprises a duplicate of the selected packets of content encrypted under a second encryption method".
- Claim 27, 35 - "packets encrypted under the first and second encryption methods represent identical content when unencrypted".
- Claim 43 - "the first and second packet of each pair of unencrypted packets represent identical content when unencrypted".
- Claim 49, 55, 61, 68, 76 - "the encrypted packets having the first and second packet identifiers represent identical content when unencrypted".
- Claim 82 – Although we intend to cancel this claim to simplify the issues for the present application, claim 82 contains similar language.

In view of the above, it is believed clear that each of the independent claims distinguishes over Jandel. Jandel's sections 103 and 105 each contain different information as established above. Jandel fails to provide any teaching that would suggest that there should be duplicate content encrypted under multiple encryption systems. Jandel also fails to provide any teaching or suggestion regarding PID assignment, per most of the claims of this application.

Claim Amendments

In light of the above, it is clear to Applicants that the claim language distinguishes over Jandel in that the claim language requires (to generalize without intent of imposing

limitations) that identical data be encrypted using two encryption techniques. While Jandel uses multiple encryption techniques, he does not encrypt the same data. Jandel encrypts data that, when combined with other encrypted data and unencrypted data in a complementary manner, can be used to generate an image with improved quality over that of the lower quality image.

In the interview discussed above, the Examiners indicated that they would be more comfortable as to the distinctions if the nature of the content were clarified to distinguish over the "image" data of Jandel. The undersigned notes that certain preferred embodiments relate to video data or audio visual data. In order to expedite the application to allowance, the claims have been clarified to all call for the content to comprise audio visual data or video data or similar language. The claims have further been clarified by amendment to more explicitly use the term "data" rather than "content" in order to facilitate clear indication that data duplicated in duplicate packets is identical.

Per Mr. LaForgia's comments, these amendments are being submitted with an RCE in order to facilitate examination. In view of the above remarks regarding Jandel, there can be no doubt that the claims clearly distinguish over the cited art. Reconsideration and allowance are respectfully requested at an early date.

During the course of preparation of this response, several minor errors were noted in the claims and are being corrected by this amendment. The most notable appears in claim 1, which erroneously called for "decoding the clear first content" instead of "decoding the unencrypted content".

The above discussion is believed to resolve all issues relating to the rejections in this case. Applicants will be happy to work with the Examiner to find an efficient resolution to any remaining issues. Accordingly, Applicants invites the Examiner to call at any time if the undersigned can be of assistance in bringing this matter to a speedy conclusion.

Concluding Remarks

In view of the above amendments and comments, it is believed clear that all claims are now in condition for allowance. The undersigned reiterates all prior arguments and additionally notes that many other distinctions exist between the cited references and the invention as claimed. However, in view of the clear distinctions pointed out above and in the prior response, further discussion is believed to be unnecessary at this time. Failure to address each point raised in the Office Action should accordingly not be viewed as accession to the Examiner's position.

No amendment made herein was related to the statutory requirements of patentability unless expressly stated herein. No amendment made was for the purpose of narrowing the scope of any claim unless an argument has been made herein that such amendment has been made to distinguish over a particular reference or combination of references.

In view of this communication, all claims are now believed to be in condition for allowance and such is respectfully requested at an early date. If further matters remain to be resolved, the undersigned respectfully requests the courtesy of a telephone call. The undersigned can be reached at the telephone number below.

Respectfully submitted, 

Jerry A. Miller
Registration No. 30,779

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Please Send Correspondence to:
Jerry A. Miller
Miller Patent Services
2500 Dockery Lane
Raleigh, NC 27606
Phone: (919) 816-9981
Fax: (919) 816-9982
Customer Number 24337